

Agricultural Test Weights and Conversions

Commodity	Unit	Approximate Weight Pounds	Approximate Weight Kilograms
Alfalfa seed	bu.	60	27.2
Barley	bu.	48	21.8
Beans, dry	bu.	60	27.2
Beans, lima	bu.	56	25.4
Beans, snap	bu.	30	13.6
Bluegrass seed	bu.	14-30	6.3-13.6
Buckwheat	bu.	43-52	19.5-23.6
Clover seed	bu.	60	27.2
Corn, ear (husked)	bu.	70	31.7
Corn, shelled	bu.	56	25.4
Cotton	bale, gross	500	226.8
	bale, net	478	216.8
Cottonseed	bu.	32	14.5
Flaxseed	bu.	56	25.4
Grain sorghums	bu.	56	25.4
Lentils	bu.	60	27.2
Milk	gal.	8.6	3.9
Millet	bu.	48-50	21.8-22.7
Milo	bu.	56	25.4
Mustard seed	bu.	58-60	26.3-27.2
Oats	bu.	32	14.5
Orchard grass seed	bu.	14	6.3
Peas, dry	bu.	60	27.2
Rice, rough	bu.	45	20.4
Rice, rough	bag	100	45.4
Rye	bu.	56	25.4
Soybeans	bu.	60	27.2
Sudangrass seed	bu.	40	18.1
Sweet potatoes	bu.	55	24.9
Timothy seed	bu.	45	20.4
Wheat	bu.	60	27.2

Length (Linear) Measurements and Conversions

1 foot = 12 inches
 1 yard = 3 feet
 1 surveyor's rod = 16.5 feet
 1 mile = 5,280 feet
 1 mile = 1,760 yards
 1 mile = 320 surveyor's rods
 1 mile = .869 nautical miles
 1 nautical mile = 1.151 mile
 1 kiloyard = 3000 feet
 1 kiloyard = .568 mile
 1 mile = 1.76 kiloyards
 1 fathom = 6 feet
 1 foot = .1667 fathom
 1 hand (equine) = 4 inches = 10.16 centimeters

Surface (Area) Measurements and Conversions

1 square foot = 144 square inches
 1 square foot = 929 square centimeters
 1 square inch = 6.451 square centimeters
 1 square yard = 9 square feet
 1 square yard = .836 square meters
 1 square rod = 30.25 square yards
 1 square rod = 272.25 square feet
 1 square rod = 25.293 square meters
 1 square centimeter = .155 square inches
 1 square decimeter = 15.5 square inches
 1 square meter = 1.196 square yards
 1 square meter = 10.764 square feet
 1 square kilometer = 247.1 acres
 1 square kilometer = .386 square mile
 1 acre = 160 square rods
 1 acre = 1 rod wide by 0.5 mile long
 1 acre = 43,560 square feet
 1 square acre = 208.71 feet by 208.71 feet
 1/2 acre = 147.58 feet wide by 147.58 feet long
 1/4 square acre = 104.355 feet wide by
 104.355 feet long
 1 acre = 4,840 square yards
 1 square acre = 69.57 yards by 69.57 yards
 1 circular acre = 235.504 feet in diameter
 1 centiare = 1 square meter
 1 are = 100 centiares
 1 are = 100 square meters

1 square are = 10 meters by 10 meters
 1 are = .0247 acres
 1 are = 119.599 square yards
 1 decare = 1,000 square meters
 1 decare = 10 ares
 1 decare = .247 acres
 1 hectare = 10,000 square meters
 1 hectare = 10 decares
 1 hectare = 2.47105 acres
 1 acre = .404686 hectares
 1 square hectare = 100 meters by 100 meters
 1 hectare = 107,639 square feet
 1 square hectare = 328 feet by 328 feet
 1 square mile = 259 hectares
 1 square kilometer = 1,000,000 square meters
 1 square kilometer = 100 hectares
 1 square kilometer = 10 hectares by 10 hectares

United States Government Land Measurements and Conversions

1 township = 36 sections
 1 section = 640 acres
 1 section = 1 square mile
 1 quarter section = 160 acres
 1 quarter section = 1/2 mile long by 1/2 mile wide
 1 eighth section = 80 acres
 1 eighth section = 1/2 mile long by 1/4 mile wide
 1 sixteenth section = 40 acres
 1 sixteenth section = 1/4 mile long by 1/4 mile wide

Surveyor's Measurements and Conversions

1 link = 7.92 inches
 1 link = .66 feet
 1 rod = 25 links
 1 rod = 16.5 feet
 1 pole = 1 rod
 1 pole = 25 links
 1 chain = 4 rods
 1 chain = 66 feet
 1 acre = 10 square chains
 1 mile = 80 chains
 1 mile = 8 furlongs
 1 furlong = 10 chains
 1 furlong = 0.125 mile
 1 furlong = 660 feet

Volume Measurements and Conversions

1 cubic foot = 1,728 cubic inches

1 cubic yard = 27 cubic feet

Dry

1 teaspoon = .1667 fluid ounces (1/6 oz.)

1 tablespoon (1/2 oz.) = 3 teaspoons (level)

1 peck = 8 quarts (dry)

1 peck = 9.31 quarts (wet)

1 bushel = 4 pecks

1 bushel grain or shelled corn = 1.244 cubic feet

1 cubic foot grain or shelled corn = .804 bushels

1 bushel ear corn = 2.5 cubic feet

1 cubic foot ear corn = .4 bushels

1 board foot = 1" x 12" x 12" nominal dimensions

1 cord (wood) = 128 cubic feet

1 cubic yard = 81 square feet - 4 inch floor

1 cubic yard = 54 square feet - 6 inch floor

Liquid

1 fluid ounce = 2 tablespoons

1 cup (liquid) = 16 tablespoons (8 ounces)

1 gallon = 4 quarts

1 quart = 2 pints

1 pint = 2 cups

1 cup = 8 fluid ounces

1 pint = 16 fluid ounces

1 quart = 32 fluid ounces

1 gallon = 128 fluid ounces

1 gallon = .1337 cubic feet

1 cubic foot = 7.48 gallons

1 gallon = 231 cubic inches

1 gallon = 32 gill

1 gallon (US) = .8327 imperial gallons (British)

1 imperial gallon (British) = 1.201 US gallons

1 gallon water (20° C) = 8.33 pounds

1 foot of water (4° C) = .4335 pounds per square inch

1 pound per square inch = 2.307 feet of water (4° C)

1 cubic foot = 62.427 pounds of water (4° C)

1 gallon = 8.33 pounds of water (4° C)

1 acre inch = 27,154 gallons liquid

1 acre foot = 325,851 gallons liquid

Velocity

1 mile per hour = 1.467 feet per second

1 mile per hour = .447 meters per second

1 mile per hour = 1.609 kilometers per hour

1 kilometer per hour = .9113 feet per second

1 kilometer per hour = .2778 meters per second

1 kilometer per hour = .6214 miles per hour

1 meter per second = 3.281 feet per second

1 meter per second = 2.237 miles per hour

1 meter per second = 3.6 kilometers per hour

1 foot per second = .3048 meters per second

1 foot per second = .6818 miles per hour

1 foot per second = 1.0973 kilometers per hour

Flow Rate**Mass**

1 short (US) ton = 2,000 pounds

1 metric ton = 2,204.62 pounds

1 short ton per day = .907 metric tons per day

1 short ton per day = 37.80 kilograms per hour

1 short ton per day = .630 kilograms per minute

1 short ton per day = 83.33 pounds per hour

1 short ton per day = 1.389 pounds per minute

1 short ton per hour = 33.33 pounds per minute

1 short ton per hour = 15.12 kilograms per minute

1 metric ton per day = 1.102 short tons per day

1 metric ton per day = 41.67 kilograms per hour

1 metric ton per day = .694 kilograms per minute

1 metric ton per day = 91.86 pounds per hour

1 metric ton per day = 1.531 pounds per minute

1 metric ton per hour = 36.74 pounds per minute

1 metric ton per hour = 16.67 kilograms per minute

Volume

1 cubic foot per hour = .0283 cubic meter per hour

1 cubic meter per hour = 35.315 cubic feet per hour

1 US gallon per hour = 3.785 liters per hour

1 gallon per hour = 3.208 cubic feet per day

1 gallon per hour = 1,172 cubic feet per year

1 gallon per hour = 90.85 liters per day

1 gallon per hour = 33,182 liters per year

1 gallon per hour = 19.98 imperial gallons per day

1 gallon per hour = 7,299 imperial gallons per year

1 liter per hour = .264 gallons per hour
 1 liter per hour = .8476 cubic feet per day
 1 liter per hour = 309.6 cubic feet per year
 1 liter per hour = 6.34 gallons per day
 1 liter per hour = 2,316 gallons per year
 1 liter per hour = 5.28 imperial gallons per day
 1 liter per hour = 1,928 imperial gallons per year

1 acre foot per day = 325,851 gallons per day
 1 acre foot per day = 13,577 gallons per hour
 1 acre foot per day = 226 gallons per minute
 1 acre foot per day = 3.77 gallons per second
 1 acre foot per day = 1,815 cubic feet per hour
 1 acre foot per day = 30.25 cubic feet per minute
 1 acre foot per day = .504 cubic feet per second
 1 acre foot per day = 67.222 cubic yards per hour
 1 acre foot per day = 1.120 cubic yards per minute
 1 acre foot per day = 51.40 cubic meters per hour
 1 acre foot per day = .857 cubic meters per minute

1 acre foot per hour = 7,820,434 gallons per day
 1 acre foot per hour = 325,851 gallons per hour
 1 acre foot per hour = 5,430.86 gallons per minute
 1 acre foot per hour = 90.51 gallons per second
 1 acre foot per hour = 43,560 cubic feet per hour
 1 acre foot per hour = 726 cubic feet per minute
 1 acre foot per hour = 12.1 cubic feet per second
 1 acre foot per hour = 1,613 cubic yards per hour
 1 acre foot per hour = 26.9 cubic yards per minute
 1 acre foot per hour = .448 cubic yards per second
 1 acre foot per hour = 1,233.48 cubic meters per hour
 1 acre foot per hour = 20.56 cubic meters per minute
 1 acre foot per hour = .343 cubic meters per second

1 acre inch per hour = 651,703 gallons per day
 1 acre inch per hour = 27,154 gallons per hour
 1 acre inch per hour = 453 gallons per minute
 1 acre inch per hour = 7.54 gallons per second
 1 acre inch per hour = 60.50 cubic feet per minute
 1 acre inch per hour = 1.008 cubic feet per second
 1 acre inch per hour = 2.241 cubic yards per minute
 1 acre inch per hour = .037 cubic yards per second

1 acre inch per hour = 1.713 cubic meters per minute
 1 acre inch per hour = .029 cubic meters per second

1 hectare meter per day = 8.107 acre feet per day
 1 hectare meter per day = 110,072 gallons per hour
 1 hectare meter per day = .338 acre feet per hour
 1 hectare meter per day = 97.29 acre inches per day
 1 hectare meter per day = 14,714 cubic feet per hour
 1 hectare meter per day = 10,000 cubic meters per day
 1 hectare meter per day = 416.67 cubic meters per hour

Circle and Sphere (Area) Measurements and Conversions

Diameter of a circle = circumference x .31831
 Circumference of a circle = diameter x 3.1416
 Area of a circle = diameter x diameter x .7854
 Surface of a ball = diameter x diameter x 3.1416
 Doubling the diameter of a pipe increases its capacity four times.

Ton (Weight) Measurements and Conversions

1 short ton (US) = 2,000 pounds
 1 short ton = 907 kilograms
 1 long ton (imperial ton or shipping ton) = 2,240 pounds
 1 long ton = 1,016 kilograms
 1 metric ton = 2,204.62 pounds
 1 metric ton = 1,000 kilograms
 1 long ton = 1.120 short tons
 1 long ton = 1.016 metric tons
 1 metric ton = 1.102 short tons
 1 metric ton = 0.984207 long tons
 1 short ton = 0.8928571 long tons
 1 short ton = 0.9071847 metric tons

Speed Measurements and Conversions

1 kilometer per hour = .6214 miles per hour
1 mile per hour = 1.609 kilometers per hour
1 meter per second = 2.237 miles per hour
1 meter per second = 3.6 kilometers per hour
1 mile per hour = .447 meters per second
1 knot = 1.151 miles per hour
1 mile per hour = .8690 knots

Application Measurements and Conversions

phosphorus (P) $\times 2.29 = P_2O_5$
 $P_2O_5 \times .44 =$ phosphorus (P)
potassium (K) $\times 1.2 = K_2O$
 $K_2O \times .83 =$ potash (K)
1 short ton per acre = 2.24 metric tons per hectare
1 metric ton per hectare = .446 short tons per acre

References

[Energy Kids Page, Energy Information Administration](#)

[Energy Information Administration](#)

[Measurement Converter, Convertit.com](#)

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[Online Conversion](#)

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[Unit Converter](#)

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